# FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST-7328 FACILITY NAME: PACIFIC COAST FEATHER COMPANY

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# **INTRODUCTION**

This fact sheet is a companion document to the draft State Waste Discharge Permit No. ST-7328. The Department of Ecology (the Department) is proposing to issue this permit, which will allow discharge of wastewater to the City of Marysville POTW. This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

Washington State law (RCW 90.48.080 and 90.48.160) requires that a permit be issued before discharge of wastewater to waters of the state is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. Regulations adopted by the state include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 WAC).

This fact sheet and draft permit are available for review by interested persons as described in Appendix A—Public Involvement Information.

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response.

GENERAL INFORMATION				
Applicant	Pacific Coast Feather Company			
Facility Name and Address	Pacific Coast Feather Company 14524 – 40 <sup>th</sup> Avenue NE Marysville, WA 98270			
Type of Facility	Down and Feather Processing			
Facility Discharge Location	Latitude: 48° 07' 40" N Longitude: 122° 10' 30" W			
Treatment Plant Receiving Discharge	City of Marysville			
Contact at Facility	Name: Rafal A. Nakonieczny Director Down and Feather Operations Telephone #: (360) 653-3696 ext. 25			
Responsible Official	Name: Joseph T. Crawford Senior Vice President – Finance Address: 14524 – 40 <sup>th</sup> Avenue NE Marysville, WA 98270 Telephone #: (360) 653-3696 ext. 31			

# BACKGROUND INFORMATION

#### DESCRIPTION OF THE FACILITY

The Pacific Coast Feather plant, located north of Marysville, Washington, receives bales of feathers and down. The material is washed, rinsed, dried, and separated in two feather processing lines. The processed product is then shipped to customers for final incorporation into products. A more detailed description of the processes employed appears in the section entitled *Industrial Processes*, below.

#### **HISTORY**

The first State Waste Discharge Permit was issued to this facility on June 28, 1993.

Limitations placed in the permit have been based on the City of Marysville Municipal Code, and variances to requirements of that ordinance as authorized by the City of Marysville. Section 14.05.020 of the Ordinance sets forth a flow limitation of "two percent of the average daily sewage flow of the public sewage system into which the waters or wastes are about to be discharged." At the present rated capacity of the treatment works, the City interprets this limitation to be equivalent to 122,000 gallons per day for any single industrial user. During previous cycles of this permit, it became clear that Pacific Coast Feather would be discharging wastewater in excess of this limitation. Therefore, the company entered into a number of successive contracts with the City of Marysville to effect a variance to the above flow limitation. In accordance with the above variances, the Pacific Coast Feather discharge permit was modified by the Department to reflect higher flow limitations.

On July 15, 1997, the permit was modified to authorize discharge of a 300,000 gallon per day monthly average flow and a 350,000 gallon per day daily maximum flow until December 1, 1997. On February 23, 1998, the permit was modified to extend the authorization to discharge at the rate of 300,000 gallons per day monthly average flow, and 350,000 gallons per day daily maximum flow, until February 28, 1998.

On March 3, 1998, the Permittee requested a modification which would authorize discharge at a rate of 300,000 gallons per day monthly average, and 350,000 gallons per day daily maximum until such time as the City might require the Permittee to reduce its flow. This permit modification was commenced in the spring of 1998, but was not issued prior to the expiration date of the then-existing permit.

The most recent permit became effective September 1, 1998, and bears an expiration date of August 12, 2003. This permit continued the authorization to discharge at a rate of 300,000 gallons per day monthly average, and a 350,000-gallons-per-day daily maximum.

# INDUSTRIAL PROCESSES

Four feather wash lines are operated at the plant.

Feathers are received in compact, dense bales, and stored in a warehouse. Approximately 98% of the feathers come from China, with most of the remainder coming from Europe. Some bales require no further processing at the plant and are shipped to customers. Down and feathers which require processing are removed from bales and placed in an unloading bunker, from whence they are removed by means of a vacuum pipe to a pre-duster storage silo. Clumps are broken up in the pre-dusting machine, and the feathers are transported to the wash storage silo.

Feathers are conveyed from the wash storage silos to the washing machines. Approximately three hot water injections, followed by four or five cold water rinses are required for the typical load. Pacific Coast Feather has achieved some reduction in water consumption by means of customizing the number of cycles for each specific type of material being washed. Water is extracted at the end of each wash or rinse cycle by means of centrifugal action. Company personnel have described the soap which they employ as being pH neutral and biodegradable.

Feathers are then conveyed by means of vacuum to a drier silo. The drier silo is heated by means of steam in the double-walled silo. The feathers are agitated inside the silo during the drying process. The evaporative water loss from the drier is estimated by Pacific Coast Feather to be approximately 19,000 to 35,000 gallons per day.

Feathers are conveyed from the drying machine to a cooling machine, in which the feathers are tumbled and cooled by means of contact with ambient air.

Feathers are then bagged, weighed, labeled, and transferred to a storage area for shipment to customers. Some batches are sent to separators prior to the bagging step.

The applicable SIC code is 5159 (feathers-wholesale).

# TREATMENT PROCESSES

The wastewater from the feather washing machines is pumped to two-each hydrosieves which are located inside the plant. The hydrosieves are slanted plate filters. Following filtering by the hydrosieves, polymer is metered to the wastewater prior to entering the three compartment sump. The baffles in the sump are arranged in such a manner as to capture the floating material and the sinking material. The capacity of the sump is 3200 gallons. Sumps are cleaned on a daily basis. At the time of the May 8, 2003 inspection, Polyfloc 6050 was employed as the settling aid.

BOD concentrations prior to August 2001 were typically in the range of 100 to 250 mg/L. BOD concentrations for the period following August 2001 have been typically less than 150 mg/L. The time period during which the reduction in BOD values occurred is concurrent with reduction in flow volumes discussed below. A possible hypothesis for this phenomenon is that the higher flow volumes may have challenged the hydraulic capacity of this system prior to August 2001. It is also possible, if the same daily solids removal schedule was employed throughout both periods, that this schedule may have reflected an inadequate maintenance frequency at the prior (higher) flow volumes. No concomitant reduction in TSS values was associated with the August 2001 date.

At this time, both BOD and TSS values indicate consistent compliance with the limitations set forth by the City of Marysville.

# FLOW VOLUME

Daily maximum flows were often above 200,000 gallons per day prior to August 2000. Flow volumes decreased significantly in August 2001, with the highest daily maximum flow since that time being 162,000 gallons. Pacific Coast Feather reduced feather and down throughput at their Marysville plant in order to reduce flow volumes, in order to comply with requirements of the City of Marysville.

A letter from the City of Marysville Engineering Department indicates that the City of Marysville has granted a conditional approval for the discharge of 200,000 gallons per day on a *monthly average* basis. The existing permit authorizes flow in terms of a daily maximum. The Department normally prefers to include a daily maximum limitation in a permit due to the fact that such a limit is more effective with respect to preventing unusually high slug loads to the POTW. Department staff discussed inclusion of a 250,000 gallon per day daily maximum flow limitation with Dale Thayer of the City of Marysville, who agreed that a 250,000 gallon per day daily maximum flow limitation would be appropriate.

The above-referenced variance to achieve a flow limitation of 200,000 gallons per day (monthly average basis) was required due to the fact that the City of Marysville ordinance contains a limitation based on percentage of POTW capacity. The rated capacity of the City of Marysville POTW is 6.1 million gallons per day at this time. However, the City is undertaking a three-phase expansion of the existing treatment plant, which is anticipated to be completed in June 2004, with a rated capacity of 13.0 million gallons per day. The City of Marysville may consider a change in the limitations in the Pacific Coast Feather permit at that time.

# SOLID WASTE HANDLING

Most of the solid waste generated at this plant results from the removal of floating material and sediment from the three-compartment sump. The sump is cleaned on a daily basis. Approximately seventeen-each fifty-five gallon drums of sediment and floating material are removed from the sump each day. A much smaller amount of solid waste is produced at the two hydrosieves.

The drums are first lined with porous bags for dewatering purposes. The bags are then removed and hauled to the landfill for disposal as solid waste. Pacific Coast Feather has approached farmers regarding solids removed from the sump as a fertilizer, but has generated little interest.

# STORM WATER

The below-grade three-baffle sump is located at such a point on an asphalt-surfaced area as to receive storm water from a surface area of no greater than 1000 square feet. Scum drum handling and solid waste dewatering activities are conducted within this drainage basin, allowing any contaminated water which escapes from these processes to reenter the sump. The water from the sump is discharged to the sanitary sewer. As the storm water entering the sump is relatively small in volume, and contaminated with by the drum handling operations, the discharge of this stormwater is consistent with the requirements of Section S7.B of the proposed permit.

# PERMIT STATUS

The existing permit for this facility was issued on August 12, 1998.

An application for permit renewal was submitted to the Department on January 27, 2003, and accepted by the Department on April 1, 2003.

# SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

The facility last received an inspection on May 8, 2003. As a result of the inspection, it was determined that the Permittee was in compliance with discharge limitations and reporting requirements.

A review of the WPLCS (water quality database) for the period from January 2000 through February 2003 indicated that all Discharge Monitoring Reports had been submitted for the period. It was noted that there was a failure to report polar oil and grease during the second quarter of 2001, and the second quarter of 2002. Values for both polar and non-polar fats, oils and greases were not reported during the third quarter of 2002. The reports for this period did not indicate any standards violations.

# WASTEWATER CHARACTERIZATION

The concentration of pollutants in the discharge was reported in the permit application and in Discharge Monitoring Reports. The characterization of the magnitude of the flow and pollutant parameters as reported on Discharge Monitoring Reports is portrayed in the table below.

CHARACTERIZATION OF WASTEWATER BASED ON DISCHARGE MONITORING REPORTS SUBMITTED JANUARY 2000 THROUGH FEBRUARY 2003						
Monitoring Period	Pollutant Parameter					
		Flow, monthly average, gpd	Flow, daily maximum, gpd	Oil and Grease (Non-Polar), mg/L	Oil and Grease (Polar), mg/L	Total Suspended Solids, mg/L
January 2000	190	243092	265017	N/A	N/A	176
February 2000	55	218045	229799	N/A	N/A	154
March 2000	220	250566	309000	40.4	55.1	205
April 2000	125	256600	289000	N/A	N/A	200
May 2000	205	268613	337000	N/A	N/A	336
June 2000	230	245576	287000	28.3	7.4	243
July 2000	120	215000	245000	N/A	N/A	56.8
August 2000	190	112441	159000	N/A	N/A	246
September 2000	245	125090	130652	39.8	20.7	338
October 2000	135	105300	110752	N/A	N/A	157
November 2000	215	85050	119764	N/A	N/A	173
December 2000	130	105000	119260	38	11	231
January 2001	65	85820	118127	N/A	N/A	55
February 2001	150	72464	115000	N/A	N/A	97
March 2001	45	119000	121000	0.7	7.6	38
April 2001	75	110000	140000	N/A	N/A	67
May 2001	105	120000	121700	N/A	N/A	153
June 2001	220	111000	118000	18.8	No Data	92
July 2001	210	107355	115000	N/A	N/A	341
August 2001	145	108774	114000	20	20	78

Maximum	245	268613	337000	40.4	55.1	341
Average	100	130919	151943	19	12	133
Minimum	1.70	72464	109000	<5	<5	33.6
February 2003	1.7	91214	141000	N/A	N/A	34
January 2003	75	123933	162000	N/A	N/A	170
December 2002	3	105000	119000	22	4.4	130.8
November 2002	17	80852	109000	N/A	N/A	84.8
October 2002	18	103800	126000	37.3	1.7	61.6
September 2002	21	95793	128000	N/A	N/A	153.6
August 2002	25	106867	124000	N/A	N/A	51.2
July 2002	25	112400	1230009	3	6	53
June 2002	50	89233	118000	5	No data	33.6
May 2002	24	105733	118860	N/A	N/A	120
April 2002	145	118200	120714	N/A	N/A	68.5
March 2002	25	114267	114800	1.1	7.5	120.8
February 2002	30	110759	121000	N/A	N/A	51.2
January 2002	60	111034	116200	N/A	N/A	81
December 2001	40	116000	121000	13.8	3.9	90
November 2001	70	116000	118200	N/A	N/A	99
October 2001	58	112097	116000	N/A	N/A	154
September 2001	50	96967	113000	N/A	N/A	84

In addition to the self monitoring conducted as a requirement of the permit, the City of Marysville collects wastewater samples at a point following the introduction of domestic wastewater. Pacific Coast Feather, as required in their permit, employs a sample point prior to introduction of nonindustrial wastewaters. Both Pacific Coast Feather and the City of Marysville use time proportional composite sampling.

# SEPA COMPLIANCE

The Pacific Coast Feather plant in Marysville is a preexisting discharger with a preexisting permit. Therefore, completion of an environmental checklist is not required for reissuance of this permit.

# PROPOSED PERMIT LIMITATIONS

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the POTW (local limits). Wastewater must be treated using all known, available and reasonable treatment (AKART) and not interfere with the operation of the POTW.

The more stringent of the local limits-based or technology-based limits are applied to each of the parameters of concern. Each of these types of limits is described in more detail below.

# TECHNOLOGY-BASED EFFLUENT LIMITATIONS

All waste discharge permits issued by the Department must specify conditions requiring available and reasonable methods of prevention, control, and treatment (AKART) of discharges to waters of the state (WAC 173-216-110). There are no federal categorical limitations applicable to indirect discharges from this facility. The concentration limits for BOD<sub>5</sub>, TSS, and oils and greases in the City of Marysville ordinance are considered by the Department to be sufficiently stringent to fulfill requirements for AKART.

# EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS

In order to protect City of Marysville from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, the City of Marysville has established local limitations for a number of the parameters discharged by this facility. These limitations are codified in ordinance. Applicable limits for this discharge include those shown for BOD<sub>5</sub>; TSS; polar fats, oils and greases; and non-polar fats, oils and greases. The limitations are indicated in the table in the following section. The City of Marysville has entered into an agreement with Pacific Coast Feather authorizing discharge of a monthly average flow of 200,000 gallons per day.

Pollutant concentrations in the proposed discharge based on the provisions of the City of Marysville ordinance are not expected to cause problems at the receiving POTW such as interference, pass-through or hazardous exposure to POTW workers. Nor are they expected to result in unacceptable pollutant levels in the POTW's sludge.

# COMPARISON OF LIMITATIONS CONTAINED IN THE PROPOSED PERMIT WITH THOSE IN THE EXISTING PERMIT ISSUED AUGUST 12, 1998

The limitations appearing in the existing permit and the proposed permit are shown in the following table. The difference in the flow limitations is a result of an agreement between the City of Marysville and Pacific Coast Feather.

Comparison of Limitations in the Existing Permit to Those in the Proposed Permit					
Pollutant Parameter	Existin	g Limits	Proposed Limits		
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	
Flow, gallons per day	300,000	350,000	200,000	250,000	
BOD <sub>5</sub> , mg/L	N/A	300	N/A	300	
TSS, mg/L	N/A	350	N/A	350	
Polar Fats, Oils and Greases, mg/L	N/A	100	N/A	100	
Non-Polar Fats, Oils and Greases, mg/L	N/A	100	N/A	100	

# MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110).

The monitoring schedule is detailed in the proposed permit under Conditions S1 and S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

# OTHER PERMIT CONDITIONS

#### REPORTING AND RECORDKEEPING

The conditions of S3 are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges [WAC 173-216-110 and 40 CFR 403.12 (e),(g), and (h)].

# OPERATIONS AND MAINTENANCE

The proposed permit contains Condition S.5 as authorized under Chapter 173-240-150 WAC and Chapter 173-216-110 WAC. It is included to ensure proper operation and regular maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment.

# PROHIBITED DISCHARGES

Certain pollutants are prohibited from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

# **DILUTION PROHIBITED**

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

# SOLID WASTE PLAN

The Department has determined that the Permittee has a potential to cause pollution of the waters of the state from leachate of solid waste.

# NONROUTINE AND UNANTICIPATED DISCHARGES

Occasionally, this facility may generate wastewater which is not characterized in their permit application because it is not a routine discharge and was not anticipated at the time of application. These typically are waters used to pressure test storage tanks or fire water systems or leaks from drinking water systems. These are typically clean waste waters but may be contaminated with pollutants. The permit contains an authorization for nonroutine and unanticipated discharges. The permit requires a characterization of these waste waters for pollutants and examination of the opportunities for reuse. Depending on the nature and extent of pollutants in this wastewater and opportunities for reuse, Ecology may authorize a direct discharge via the process wastewater outfall, require the wastewater to be placed through the facilities wastewater treatment process or require the water to be reused.

# GENERAL CONDITIONS

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to POTW permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending, or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes, or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G10 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G11 requires the payment of permit fees. Condition G12 describes the penalties for violating permit conditions.

# PUBLIC NOTIFICATION OF NONCOMPLIANCE

A list of all industrial users which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

# RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for a period of five (5) years.

# REFERENCES FOR TEXT AND APPENDICES

Washington State Department of Ecology.

Laws and Regulations (<a href="http://www.ecy.wa.gov/laws-rules/index.html">http://www.ecy.wa.gov/laws-rules/index.html</a>)

Permit and Wastewater Related Information (http://www.ecy.wa.gov/programs/wq/wastewater/index.html)

# **APPENDICES**

# APPENDIX A—PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page one of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public Notice of Application (PNOA) was published on April 3 and April 10, 2003, in the *Everett Herald* to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

The Department published a Public Notice of Draft (PNOD) on October 23, 2003, in the *Everett Herald* to inform the public that a draft permit and fact sheet were available for review. Interested persons were invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents were available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments were mailed to:

Water Quality Permit Coordinator Washington State Department of Ecology Northwest Regional Office 3190 – 160<sup>th</sup> Avenue SE Bellevue, WA 98008-5452

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the thirty (30)-day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-216-100). Public notice regarding any hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing.

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

The Department will consider all comments received within thirty (30) days from the date of Public Notice of Draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, (425) 649-7025, or by writing to the address listed above.

# APPENDIX B—GLOSSARY

**Ammonia**—Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

**Average Monthly Discharge Limitation**—The average of the measured values obtained over a calendar month's time.

**Best Management Practices (BMPs)**—Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

 $BOD_5$ —Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The  $BOD_5$  is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

**Bypass**—The intentional diversion of waste streams from any portion of the collection or treatment facility.

**Categorical Pretreatment Standards**—National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

**Compliance Inspection - Without Sampling**—A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

**Compliance Inspection - With Sampling**—A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample—A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots).

**Construction Activity**—Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building; construction of residential houses, office buildings, or industrial buildings; and demolition activity.

**Continuous Monitoring**—Uninterrupted, unless otherwise noted in the permit.

**Engineering Report**—A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

**Grab Sample**—A single sample or measurement taken at a specific time or over as short period of time as is feasible.

**Industrial User**—A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

**Industrial Wastewater**—Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business; from the development of any natural resource; or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

**Interference**—A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

- Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
- Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) [including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SWDA], sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

**Local Limits**—Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

**Maximum Daily Discharge Limitation**—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

**Method Detection Level (MDL)**—The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

**Pass-through**—A discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

**pH**—The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

**Potential Significant Industrial User**—A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

- a. Exceeds 0.5 % of treatment plant design capacity criteria and discharges <25,000 gallons per day; or
- b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass-through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).

The Department may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

**Quantitation Level (QL)**—A calculated value five times the MDL (method detection level).

# Significant Industrial User (SIU)—

- 1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; and
- 2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority\* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement [in accordance with 40 CFR 403.8(f)(6)].

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority\* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

\*The term "Control Authority" refers to the Washington State Department of Ecology in the case of nondelegated POTWs or to the POTW in the case of delegated POTWs.

**Slug Discharge**—Any discharge of a nonroutine, episodic nature, including but not limited to an accidental spill or a noncustomary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

**State Waters**—Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

**Stormwater**—That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

**Technology-based Effluent Limit**—A permit limit that is based on the ability of a treatment method to reduce the pollutant.

**Total Coliform Bacteria**—A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.

**Total Dissolved Solids**—That portion of total solids in water or wastewater that passes through a specific filter.

**Total Suspended Solids (TSS)**—Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Water Quality-based Effluent Limit—A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.